

Toward a new typology of relative clause constructions*(2)**

— syntax-based and pragmatics-based formation —

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Abstract

The aim of the present paper is to propose a new typology of relative clause constructions along the line of to what extent particular languages use the syntax-based (SB) strategy and the pragmatics-based (PB) strategy. It is pointed out that the notion of 'relevance' plays an important role in relating the head and the relative clause. In §.5.2, what factors are relevant to the PB strategy is suggested. In §.6.1, it is implied that the new typology put forward here is based on the gradation of syntax-dominant (SD) languages and pragmatics-dominant (PD) ones. Appendix includes the data to be collected and some of the PB examples from Japanese, Korean and Ainu.

1. Introduction

This paper is an attempt to show the interface between field linguistics and theory, centering around relative clause constructions (RC C, hereafter). I will propose here a new typology of RC Cs. Matsumoto (1996) suggests that Japanese relative clauses (RC) are formed not only syntactically, but also semantically and pragmatically. Now I call the former type of RC formation *syntax-based* (SB) and the latter type of RC formation *pragmatics-based* (PB).

This paper may be geared toward theorizing my idea on RC formation along the line of the SB and PB strategies. Needless to say, more data from various languages are needed to substantiate the typology put forward here with the conclusion that field linguistics and theory always go hand in hand.

Before going into details, it is necessary to define RC Cs more accurately. The position of a head is not relevant in (1).

(1) RC C: [Relative Clause] [Head]

We refer to the Head + RC as an RC C. The term RC, in turn, will be used to refer to the adjective clause that modifies the head noun.

2. Kuno's assumption: A thematic constraint on RCs

Kuno (1973a:158, 1976:420) proposes the thematic constraint on RCs, since the RC Cs and the topic constructions share various characteristics.

(2) The Thematic Constraint on RCs: A relative clause must be a statement about its head noun. (Kuno 1976:420)

This assumption is relatable to the 'aboutness' condition of topic constructions. (This constraint is applicable to English, too. See Takami (1997: 137-83).) Observe the parallelism between the RC Cs and the topic constructions shown in (3), (4) and (5).

(3) a.sono mura *niwa* oozei no hito ga kita
b.sono mura *wa* oozei no hito ga kita
c.[oozei no hito ga kita] mura (Kuno 1973a:158)
the village that many people came to

(4) a.Hanako ga Taroo to benkyoosita
b.Taroo *towa* Hanako ga benkyoosita.
c.*Taroo *wa* Hanako ga benkyoosita
d. *[Hanako ga benkyoosita] Taroo (Kuno 1973a:159)
Taroo, with whom Hanako studied

(5) a.Hanako ga Taroo to issyoni benkyoosita
b.Taroo *towa* Hanako ga issyoni benkyoosita
c.Taroo *wa* Hanako ga issyoni benkyoosita
d.[Hanako ga issyoni benkyoosita] Taroo (Kuno 1973a:159)
Taroo, with whom Hanako studied together

Note, however, that we have two types of counterexample to Kuno's assumption. One is the case in which a topic construction does not have its correspondent RC C (See (6) and (7) below). The other is the case in which an RC C does not have its

correspondent topic construction (See (8), (9) etc).

- (6) a. sakana wa tai ga ii
b. *[tai ga ii] sakana
- (7) a. nekutai wa aoino o katta
b. *[aoino o katta] nekutai
- (8) a. *sono naihu wa Hanako ga Taroo o sasita
b. [Hanako ga Taroo o sasita] naihu (Kuno 1973a:167)
- (9) a. *sono riyuu wa Taroo ga kessekisita
b. [Taroo ga kessekisita] riyuu (Kuno 1973a:167)
- (10) a. *Tookyoo wa Taroo ga Hanako ni atta
b. [Taroo ga Hanako ni atta] Tookyoo (Kuno 1973a:168)
- (11) a. *sono komaasyaru wa toire ni ikenai
b. [toire ni ikenai] komaasyaru (Matsumoto 1996:110)
- (12) a. *sono koohii wa nemurenai
b. [nemurenai] koohii (the name of Morinaga's canned coffee)

It must be kept in mind that a typical topic construction like (6) does not have its correspondent RC C.

3. Pragmatics-based formation of RC constructions

The examples in (9), (11) and (12) above suggest that intuitions about the nature of 'aboutness' that come from the topic construction cannot therefore be assumed to shed light directly on RC Cs (Matsumoto 1996:111). Now, observe the following examples, in which the construal of the RC Cs is based mainly on semantics and pragmatics.

- (13) [[kookoo nyuusi ni zettai ukaru] katei-kyoosi] o sagasite-imasu
a. (I) am searching for a tutor (with whose assistance) (one) can be sure to pass the high-school entrance exam.
b. (I) am searching for a tutor (who) can be sure to pass the high-school entrance exam. (Matsumoto 1996:108)
- (14) [[toire ni ikenai] komaasyaru]
commercials (because of wanting to watch which) (one) cannot go to the

bathroom. (Other readings are possible.) (Matsumoto 1996:110)

(13a) is a more plausible reading than (13b) although in (13a), the relation of the head noun and the RC is not based on syntax. (13a) and (14) show that the plausible readings are obtained not by the subcategorization relation between the head and the verb in the RC. Thus, Matsumoto (1996:115) proposes that in addition to the valence of the RC predicate, semantic and pragmatic information plays a role in the interpretation of RC Cs in Japanese. Now it turns out that we have the two types of the RC C. One is the RC C formed and construed by the syntax-based strategy, which we call the SB RC C, and the other one is the RC C formed and construed by the pragmatics-based strategy, which we call the PB RC C. We shall illustrate their typical examples below.

(15) a.[nemur-e-nai] hito (SB)

one who cannot sleep well

b.[nemur-e-nai] koozii (PB)

the coffee, (by drinking which) (one) does not sleep

(16) a.[toire ni tikai] hito (SB)

one who is near the bathroom

b.[toire ga tikai] hito (PB)

one who is frequently called by nature

(17) a.[toire ni ik-e-nai] hito (SB)

one who cannot go to the bathroom

b.[toire ni ik-e-nai] komaasyaru (PB)

(See (14).)

(18) a.[oisii] udon (SB)

tasty noodles

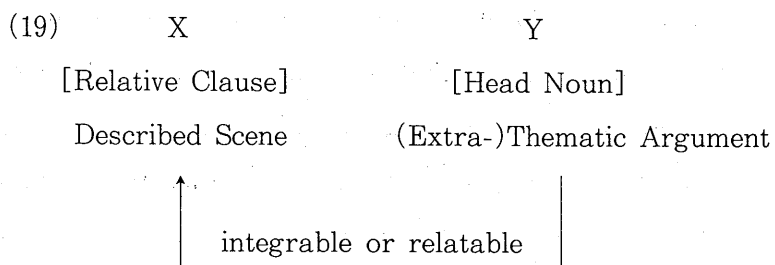
b.[oisii] udon-ya (PB)

a noodle shop (where) (one) (can) (eat) tasty noodles

4. The notion of relevance and the RC constructions

Shibatani (1994) introduces the notion of relevance to give a unified account to possessor raising, ethical datives, adversative passives and topic constructions in various

languages, and indicates that possessors, ethical datives, adversative subjects and topics in these constructions are, in some cases, extra-thematic arguments (ETA), i.e. not subcategorized by verbs, and the notion of relevance plays an important role in relating the ETAs and the described scenes (DS) stated by the residual clause-like expressions. I propose here that the notion of relevance is applicable to the formation and construal of the RC Cs, too, whether they are syntax-based or pragmatics-based. See the following schema.



This schema shows that when the the head noun is syntactically or pragmatically integrable into or relatable to the described scene (DS) stated by the RC, the RC C is construable. To put it another way, the formation of RC Cs, whether they are SB or PB, can be explained in terms of the notion of relevance, not in terms of kuno's thematic constraint on RCs. In the SB RC Cs, the head noun is associated with the RC by syntactic information, i.e. subcategorization, while in the PB RC Cs, the head noun is relatable to the RC on the basis of pragmatic information. In both types of RC C, the head noun and the RC are relatable to each other in terms of the notion of relevance.

5. A typology of RC constructions based on the SB strategy and the PB strategy.

In §.3, we pointed out the two types of RC C, i.e. SB RC Cs and PB RC Cs. In §.4, we suggested that both types of RC C can be explained in terms of the notion of relevance. We are now in a position to propose a new typology of RC Cs along the line of the SB strategy and the PB strategy.

5.1. A new typology of relative clause constructions

We can typologize RC Cs in various languages along the line of how they are formed and construed. It turned out that two strategies function to form RC Cs, i.e. the syntax-based strategy and the pragmatics-based one. The combination of \pm SB and \pm PB logically produces the four types of RC formation; (i) -SB, -PB, (ii) +SB, -PB, (iii) -SB, +PB, (iv) +SB, +PB. Note that types (i) and (iii) can be excluded. Type (i) is not directly relevant here, since languages that belong to type (i) have no RC Cs (See an example from Walbiri, Comrie 1983:137). Type (iii) is excluded, since, presumably, there is no language that does not utilize the SB strategy. Type (ii) is syntax-based and type (iv) is pragmatics-based. It seems likely that languages cannot be grouped into these two types rigidly, rather they can be grouped along the line of to what extent they use the SB strategy and the PB strategy. Thus, with regard to RC formation, languages can be placed in a position on the continuum shown in (20).

(20) the typology of RC formation based on the SB/PB strategy

syntax-based		pragmatics-based
Core-Arguments	Obliques	Extra-Thematic Arguments
Indonesian	Tagalog	Chinese
	English	Korean (Tagashira 1972:225)
		Japanese (Matsumoto 1996)

It has been made clear from what has been discussed so far that languages can be typologized along the line of to what extent the SB strategy and the PB strategy are stretchable, as indicated in (20). Recall, in this relation, that languages differ in to what extent the NP is relativizable on the hierarchy of the grammatical relations (Keenan & Comrie, 1977).

(21) the typology of RC formation based on the grammatical relations

Core Arg	Peripheral Arg	Extra-Thematic Arg
Subject DO IO	Obliques	
Indonesian	English	Chinese(?)
Tagalog		Korean Japanese

Languages that relativize only subject NPs seem to be very weak in expression

power. Note, however, that these languages have devices which feed subject noun phrases, such as voice alternation in Philippine languages and applicative affixation and passivization in Indonesian, which forms RC Cs in which various semantic roles function as their heads, after their being promoted to subjects. Thus, by showing what semantic roles can be relativized, we can integrate the two typologies mentioned above as in (22).

(22) semantic roles relativized

	Agt	Pat	Loc	Dir	Ben	Instr	Poss	Comp	Extra-Thematic Arg	
IN:	meN-	di-	-i	-i	-kan		OK			
		Pas	————— applicative affixation and passivization (yang)							
Tag:	-um-	-in	-an	-an	i-	i-	OK			
	mag-	————— voice alternation (-ng/na: Linker)								
Eng:	who	whom	in/at	to	for	with	whose	OK		
Ch:								OK(?)		
Kor:								OK	OK	
Jap:	————— (?)							OK	OK	OK

(22) explicitly shows that languages differ in to what extent the NP(s) is/are relativizable on the hierarchy of semantic roles. Note, in addition, that RC formation is closely related to the voice phenomena when RC formation is sensitive to a particular grammatical relation.

5.2. Factors controlling the pragmatics-based strategy

It is important here to examine what factors play a role in the formation of PB RC Cs. Although they must be singled out from various languages that have PB RC Cs, we can speculate that the following factors are operative in the PB strategy.

(23) factors that seem to be operative in the PB strategy

- a. Head final RC Cs (Japanese, Korean)
- b. Gap type, i.e. languages that do not have relativizers and/or relative pronouns tend to allow PB RC Cs (Japanese, Korean).
- c. Languages that have topic constructions tend to accept PB RC Cs, since they are licensed by pragmatic information such as relevance (Japanese, Korean, Chinese, Lisu, etc.). (See Li and Thompson (1976) for more

information.) As mentioned in §.3, this fact leads Kuno to postulate the thematic constraint on RCs.

- d. the type of languages that do not distinguish between a predicative verb (i.e. finite verb) and an attributive verb (i.e. an N/NP modifying form) tends to allow PB RC Cs (Japanese).

It seems that factor (d) is not critical, since Classical Japanese makes a distinction between the predicative verb forms and the attributive verb forms but it does have the PB strategy, although Keenan (1985:160-1) suggests that “a more regular difference between prenominal and postnominal RCs concerns the form of the main verb of Srel, which we shall denote by Vrel. In prenominal RCs, Vrel is almost always in some sort of non-finite form, [...] We may note that the prenominal RCs in Japanese do not put Vrel in a non-finite or specifically relative form, but the Japanese case appears to be the exception among prenominal RCs here”. Now, observe some of the head final RC Cs, and examine which factors are operative there.

(24) some examples of head final RC Cs

Jap. [X Y V] [NP]: a, b, c, d

Kor. [X Y V-n] [NP]: a, b, c

Chn. [X V Y de] [NP]: a, c, e (Relativizer)

Trk. [X Y V-d(i)k-Z] [NP]: a, f (Nominalizer)

Thus, the factors mentioned above seem to form a hierarchy like $a > b > c > d$. In addition, it can be assumed that languages with many of the factors higher on the hierarchy of $a > b > c > d$ tend to accept the PB formation of RC Cs. Note that the Turkish language is SB and very different from Japanese (Comrie, p.c., 2000, Feb. the 4th), since it has only one factor, i.e. (23a). It may be said that head-initial languages have PB RC Cs if they have factors b and c. This must await further research based on language data.

6. Further implications

6.1. Formalization

Kuno (1973a:151) compared RC Cs in Japanese and English and reported that Japanese can relativize the NP in an adverbial clause while English cannot, as

indicated in (25) and (26).

- (25) a. *cookies that we ended up with diarrhea when we ate
b. [haraippai tabetara, geri o sitesimatta] okasi (Kuno 1973a:151)
c. [(Adv Clause), geri o sitesimatta] okasi (Other readings are possible.)
- (26) a. nemur-e-nai-kooonii
sleep-can-not-coffee
b. [(kafein ga ooi node, nondara) nemurenai] kooonii
the coffee with much caffeine, (by drinking which) (one) cannot sleep
c. [(Adv Clause), nemurenai] kooonii (Other readings are possible.)

Kuno does not explain why such a difference comes out between Japanese and English. Note, however, that this can be explained in terms of the fact that Japanese has both the SB and PB strategies to form the RC Cs. The RC Cs based on the PB strategy does not necessarily express adverbial clauses, since what is described by them can be surmised from pragmatics that relates the head to the RC, which leads to the fact that several readings are possible, depending on the reason or pragmatic information. To put it another way, pragmatics based on the notion of relevance associates the head with the RC, and makes (25c) and (26c) possible in Japanese. Thus, the schema like (25c) and (26c), now termed Adverbial Clause Deletion, is an attempt to formalize the PB strategy, which explains the difference between (25a) and (25c).

It may be implied here that the new typology put forward here is based on the gradation: syntax-dominant (SD) languages and pragmatics-dominant (PD) ones, where the following implicational law is applicable.

- (27) PD languages \supset SD languages, where PD languages simultaneously have the characteristics of SD ones, but the converse is not true.

It can be assumed that PD languages have the characteristics such as

- (28) a. Pragmatically recoverable elements can be omitted quite freely.
b. PD languages tend to have overt case markers and adpositions, producing relatively free word order and thus elements can be omitted quite freely.
etc.

Needless to say, (28a) and (28b) are closely related to each other.

6.2. Internally headed RCs with the particle -no (Kuroda)

Kuroda illustrates internally headed (IH) RC Cs followed by the particle -no in Japanese. Examples (29) and (30) are mine.

- (29) a. [[[Taroo ga gake kara otita] no] o mikaketa] hito: Complement
the one who noticed that Taro fell over the cliff
b. [[[Taroo ga gake kara otita] no] o tasuketa] hito: Internally headed RC
the one who rescued Taro who had fallen over the cliff
- (30) a. Musasi wa [[Kojiro ga tikazuitekuru] no] o sattisita: Comp/IH RC C
Musashi noticed that Kojiro was approaching him. (Complement)
Musashi noticed Kojiro who was approaching him. (IH RC C)
b. Taroo wa [[kyoozyu ga gakusei o kumifuseta] no] o ketaosita: IH RC C
Taro kicked down the student the professor held down.
Taro kicked down the professor who held down the student.

Note that both syntactic and *pragmatic* information plays an important role in the formation of this type of RC Cs. See Tsujimura (1996:268-70) for further information.

6.3. The field linguistics/theory interface

Finally, more data from various languages will be needed to substantiate the typology put forward here.

The classes of RC Cs we must collect will be as follows.

- (31) a. RC Cs that relativize Core Arguments.
b. RC Cs that relativize Obliques.
c. RC Cs that relativize Extra-Thematic Arguments.

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Appendix

A. Data: Relative Clause Constructions

(1) RC Cs that relativize Core Arguments

Agt: the man who left for the Philippines yesterday

the man who killed the woman

Pat: the man whom the woman hit

Rec: the woman to whom the man gave a ring

(2) RC Cs that relativize Obliques or Peripheral Arguments

Loc: the library where Taro used to study

Dir: the library to which Taro used to go

Ben: Hanako for whom Taro did her homework

Ins: the bat with which Mark hit the 61st home run

Pos: the tree whose trunk is very big

Com: the girl who Mary is taller than

(3) RC Cs that relativize Extra-Thematic Arguments

a. nemurenai kohii

[the coffee, if we drink it, we cannot sleep well *for various reasons*]

(Other readings are possible, depending on the reason.)

b. toire ni ikenai komaasyaru

[the commercial which prevents us from going to the bathroom *for various reasons*] (Other readings are possible.)

c. oisii udon-ya

[the noodle shop where we can eat tasty noodles]

d. susi ga taberarenaku naru tyawanmusi

[the soup, because we become full if we drink it, we cannot eat susi too much]

e. sanma ga yakeru nioi

f. [osasimi ga tabetai (ga)] issin de, sakana o ryoori sita

Notes:

1. Take the interference of translation into account.
2. The unmarked voice is preferable.

3. The voice alternation may occur depending on the definiteness of the nouns used.

B.Examples

Japanese (SOV)

1. [[atama ga yokunaru] hon].
head Nom get better book
the book (by reading which) (one's) head gets better (Matsumoto 1989:230)

Korean (SOV)

1. [[meri ka coh-a-ci-nun] chayk]
head Nom good-become-Inf-AdN book
the book (by reading which) (one's) head gets better (Matsumoto 1989:232)
2. [[sikmo ka mun-nul tat-nun] soli]
servant Nom gate-Acc close-AdN sound
the sound of servants closing the gate (Tagashira 1972:224)
3. [[kheykhu ka tha-nun] naymsej]
cake Nom bake-AdN smell
the smell of the cake baking (Tagashira 1972:225)

Ainu (SOV)

1. [[aynu ek] hum] (Itadori)
man come sound
the sound of a man's coming (Shibatani 1990:41)
2. [[okkayo cis] sir] (Ishikari)
man cry sight
a sight of a man's crying (Shibatani 1990:41)

Chinese (SVO)

1. *[[tou bian congming de] shu]
head become smart Rel book
the book (by reading which) (one's) head gets better (Matsumoto 1989:233)

Abbreviations: Acc (Accusative), AdN (Adnominal form), Inf (Infinitive form),

Nom (Nominative), Rel (Relativizer)

Note: My colleague, Manabu Wada, gave me some suggestions on the data and transliteration in Korean.

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